REMARKS

Reconsideration of the present application, in view of the arguments presented herein, is respectfully requested.

I. STATUS OF THE CLAIMS

Claims 1-24 are pending in this application.

II. Claim Rejections under 35 U.S.C. §102

(i) Claims 1-10, 12-17 and 19-24 have been rejected under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,690,067 to Ker et al. ("the Ker patent").

(ii) Claims 1, 12 and 19 have been rejected under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,847,059 B2 to Tsuji et al. ("the Tsuji patent").

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. **(See MPEP 2131; Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).**

However, Ker and Tsuji each fail to teach or suggest all of the features of the presently claimed invention as recited in claims 1,12 or 19.

In particular, Ker and Tsuji each at the very least fail to teach or suggest either a semiconductor device or a method of forming a semiconductor device in which a bipolar junction transistor operates in a cut-off mode which cuts off current from flowing from the first

well to the third well as essentially recited in claims 1 and 19. For a bipolar junction transistor (BJT) there is an active mode, saturation mode and a cut-off mode. Among the above-mentioned operating modes, the bipolar junction transistor recited in claims 1 and 19 which cuts off current from flowing from the first well to the third well operates in a cut-off mode. An illustration of the above-mentioned cut-off mode which is within the scope of claims 1 and 19 is set forth, for example, in an exemplary embodiment **on page 10, lines 7-14 of the present specification and Fig. 3**. In the above exemplary embodiment, a voltage V2 is applied to the first type diffusion region 340 of the third sub-well SW3 and adjusted so that there exists a backward voltage between the N-type diffusion region 340 (emitter D) in the third sub-well SW3 and the P-type diffusion region 330 (base C) in the first sub-well SW1 of the NPN-type BJT Q2 (e.g. BJT recited in claims 1 and 19). Therefore, the BJT Q2 operates in the cut-off mode. Thus, the IC1 current cannot flow to the third well W3, and latch up is prevented.

In contrast, Ker and Tsuji are each completely silent regarding a semiconductor device or a method of forming a semiconductor device in which the bipolar junction transistor operates in a cut-off mode which cuts off current from flowing from the first well to the third well as essentially recited in claims 1 and 19.

Furthermore, applicants also disagree with the inherency statement in the instant Office Action with regard to the expression "cuts off current flowing from the first well to the third well" as recited in claims 1 and 19. As mentioned above, the semiconductor devices recited in claims 1 and 19 are structurally distinct from the semiconductor devices described in Ker and Tsuji. In particular, as discussed, Ker and Tsuji each fail to teach or suggest a semiconductor device or a method of forming a semiconductor device in which the bipolar junction transistor operates in a cut-off mode which cuts off current from flowing from the first well to the third well as essentially recited in claims 1 and 19.

Moreover, with regard to the above inherency discussion, it is further noted that cut-off mode is not the same as cutting of current off current flowing from the first well to the third well. Rather, cut-off mode is an operating mode which does not only entail producing the result of cutting current from flowing from the first well to the third well . In other words, cut-off mode is

a specific operating mode, whereas cutting of current is simply one kind of result of the cut-off mode. Ker and Tsuji fail to show the above cut-off mode and thus each describe structurally distinct semiconductor devices from those recited in claims 1 and 19. Therefore, Ker and Tsuji each fail to anticipate claims 1 and 19.

For the reasons set forth above, withdrawal of the above rejections to claims 1 and 19 is respectfully requested. As claims 6-10 depend from and incorporate all of the limitations of claim 1 and claims 23-24 depend from and incorporate all of the limitations of claim 19, withdrawal of the rejection to these dependent claims is likewise respectfully requested.

Furthermore, Ker and Tsuji each also fail to teach or suggest all of the features recited in claim 12.

As previously stated, neither the middle well in Fig. 3b of Ker nor well region 22 of Tsuji are insulating regions. However, even assuming arguendo that the middle well of Ker and well region 22 of Tsuji are insulating regions, the semiconductor devices of Ker and Tsuji are still structurally distinct from the semiconductor device recited in claim 12. As discussed above, Ker and Tsuji each fail to teach or suggest a cut-off mode. **(See discussion above with regard to claims 1 and 19).** Furthermore, Ker and Tsuji are each completely silent regarding a semiconductor device wherein an insulating region having an N-type diffusion region receives an off mode control voltage for preventing a latch-up current as recited in claim 12. Rather, as can be seen from **Fig. 3b of Ker**, the first type diffusion region of the middle well does not receive an off mode control voltage for preventing a latch-up current. In addition, as can be seen from **Fig. 1 of Tsuji**, the first type diffusion region of the well region 22 does not receive an off mode control voltage for preventing a latch-up current.

Moreover, the off mode control voltage recited in claim 12 is not an inherent feature but rather is a structural element, which Ker and Tsuji each fail to disclose. Therefore, the semiconductor devices of Ker and Tsuji are structurally distinct from the semiconductor device recited in claim 12. Therefore, Ker and Tsuji each fail to anticipate claim 12.

For the reasons set forth above, withdrawal of the above rejections to claim 12 is requested. As claims 13-18 depend from and incorporate all of the limitations of claim 12, withdrawal of the rejection to these dependent claim is likewise requested.

III. 35 U.S.C. §103 REJECTIONS

Claims 11 and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ker .

As discussed above, Ker and Tsuji each at the very least fail to teach or suggest either a semiconductor device or a method of forming a semiconductor device in which a bipolar junction transistor operates in a cut-off mode as essentially recited in claim 1. As claim 11 depends from and incorporates all of the limitations of claim 1, removal of the rejection to this dependent claim is requested.

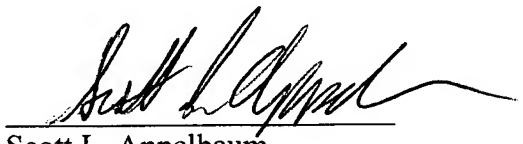
Additionally, as discussed above, Ker and Tsuji each at the very least fail to teach or suggest a semiconductor device wherein an insulating region having an N-type diffusion region receives a cut-off mode control voltage for preventing a latch-up current as recited in claim 12. As claim 18 depends from and incorporates all of the limitations of claim 12, removal of the rejection to this dependent claim is requested.

IV. CONCLUSION

For the foregoing reasons, applicants respectfully submit that the instant application is in condition for allowance. Early notice to that end is earnestly solicited.

If a telephone conference would be of assistance in furthering prosecution of the subject application, applicants request that the undersigned be contacted at the number below.

Respectfully submitted,



Scott L. Appelbaum
Reg. No. 41,587
Attorney for Applicants

F. Chau & Associates, LLC
130 Woodbury Road
Woodbury, NY 11797
Tel: (516) 692-8888
Fax: (516) 692-8889